

**REMARKS**

Claims 1-31 are currently pending in the application. By this amendment, claims 1, 2 and 31 are amended for the Examiner's consideration. Support for the amendment(s) is provided at page(s) 13 of the present specification. No new matter is added. Reconsideration of the rejected claims in view of the above amendments and the following remarks is respectfully requested.

***35 U.S.C. §112, 2<sup>nd</sup> Paragraph***

Claim 2 was rejected under 35 U.S.C. §112, 2<sup>nd</sup> paragraph. This rejection is respectfully traversed. Claim 2 is amended to provide proper antecedent basis to "the adhesive". This amendment is not made for overcoming any prior art of record.

Applicants request withdrawal of the 112, 2<sup>nd</sup> paragraph, rejection.

***35 U.S.C. §103 Rejection***

Claims 1, 2, 14-16, 21-24 and 31 were rejected under 35 U.S.C. §103(a) over Austrian Reference 405,560 in view of German Reference 29703962 when considering any of Scarlett, Keller and Turner. Claims 1-31 were rejected under 35 U.S.C. §103(a) over Austrian Reference 405,560 in view of German Reference 29703962 when considering any of Scarlett, Keller and Turner and further in view of Roesch. These rejections are respectfully traversed.

The invention is adapted to solving the problem of the applying glue or adhesive to a flooring panel system at the site of installation. It is well known that applying glue or adhesive at the site of flooring installation is time-consuming and creates many known problems, as previously discussed throughout examination. By way of brief explanation, these problems may include:

1. application of glue may be non-uniform over the edges or sides of the flooring panels;

2. excessive quantity of glue may result which then adheres to the decorative layer of the panels, or to the installers, themselves, e.g., unpleasant welling out of excess glue; or
3. the glue has a tendency to set prematurely.

The panels of the invention are provided with glue -- whether the glue is active in advance or becomes active when the panels are joined on site -- in addition to a locking mechanism. This reduces the number of manual stages involved in laying out the panels. Also, the step regarded as time-consuming and unpleasant is eliminated; namely, the application of glue at the job site is eliminated. This, in turn, eliminates the problem of the glue setting prematurely during delays in the laying process, thereby ensuring a practically seamless joining. Also eliminated is the unpleasant welling out of excess glue, which must be removed immediately after having left the joints so as to avoid the formation of spots on the decorative layer. Lastly, by using the invention, any additional fixing means for holding the components together during the setting phase is superfluous since the locking mechanism automatically provides for a secured connection.

The Examiner is of the opinion that one of ordinary skill in the art would be motivated to combine the flooring system in Austrian reference 405,560 with a glue taught in one of the remaining references. Applicants disagree with the Examiner for the reasons set forth below.

The Austrian reference 405,560 is directed to tongue and groove flooring panels having a locking mechanism. In this reference, a projection of the locking mechanism snaps into the undercut of the tongue and locks the adjacent panels to one another without any need for glue or other adhesives. The Austrian reference 405,560 is, in fact, silent as to the use of glue, does not address the need for glue, nor would one of skill in the art at the time of the invention foresee the any reason to use glue. For this reason, Applicants submit that the Austrian reference, itself, does not teach the desirability to have glue and that one of ordinary skill in the art would not have known to use glue with this flooring panel system. In fact, Applicants submit that the locking mechanism would make the use of glue superfluous at the time of the invention.

Scarlett is directed to a structural beam and joint system. This system is not a flooring panel system, nor even remotely related to a flooring panel system. In fact, Scarlett would be used as I beams or joists or other structural members (col. 5, lines 62-65). Accordingly one of ordinary skill in the art would not have been motivated or known to combine the Austrian reference 405,560 and Scarlett to achieve the claimed invention. The combination of such non-analogous references would simply be improper.

In any event, Scarlett still does not show the features of the invention, as missing from Austrian reference 405,560. In Scarlett, a groove is cut into a chord 10 and 20 as shown in Figure 3. A web member 30, as shown in Figure 1, comprises a generally planar panel, which has an appendage or tongue 31 formed along each longitudinal edge adjacent the respective chord member. (See, col. 4.) In the manufacture of the I-beam or similar structural member, a suitable adhesive is applied within the groove of the chord by a nozzle means which spreads the adhesive over all surfaces of the groove. A machine with a tapered series of steel rollers may be used to apply pressure to bottom and top flange surfaces 12 and 22 so as to force the flange and web components together, and the tongue 31 into the groove 13 as the beam components are advanced through the machine. The glue is not preapplied, and as described at col. 6, lines 24-29,

[e]xcess glue may be transmitted by the pressure of the closed joint into a pocket formed between the tip 53 of spline 18 and the terminus 39 of slot 36 as well as in two pockets formed between groove bases 17 and tongue edges 33, as may be seen in FIG. 8.

Thus, in using the glue of Scarlett in the application of the Austrian reference, an excessive quantity of glue may result which would adhere to the decorative layer of the panels, or to the installers, themselves. Also, this glue may set prematurely or have a tendency to have unpleasant welling out of excess glue. Also, by using the glue in Scarlett, additional fixing means for holding the components together during the setting phase is required. These are the exact problems avoided by the claimed invention. Hence, even if one were to combine Scarlett with the Austrian reference, which would be impermissible, the result would still not achieve the

advantages of the present invention, nor would the features of the present invention be provided in such a combination.

Much like Scarlett, Keller also shows a structural beam. This system is not a flooring panel system, nor even remotely related to a flooring panel system. In fact, Keller would be used as I beams or joists or other structural members. Accordingly, one of ordinary skill in the art would not have been motivated or known to combine the Austrian reference 405,560 and Keller to achieve the claimed invention. The combination of such non-analogous references would simply be improper.

In any event, Keller still does not show the features of the invention, as missing from Austrian reference 405,560. In Keller, there is only a mention of adding glue to either the tongue or groove. There is no suggestion or teaching that the glue is preapplied as in the claimed invention. Thus, in using the glue of Keller in the application of the Austrian reference,

1. an excessive quantity of glue may result which would adhere to the decorative layer of the panels, or to the installers, themselves, e.g., unpleasant welling out of excess glue is possible;
2. this glue may set prematurely; or
3. a means would be required to hold the panels together during the gluing process so that the glue can set.

These are the exact problems avoided by the claimed invention. Hence, even if one were to combine Keller with the Austrian reference, which would be impermissible, the result would still not achieve the advantages of the present invention, nor would the features of the present invention be present in such a combination.

Turner shows a wood joint and briefly discusses the use of glue. However, Turner does not show the use of preapplying glue in order to avoid the many problems of the prior art and which are solved by the present invention, as mentioned above.

Additionally, Applicants submit that when the problem or the source of the problem is not even recognized in the art, the claimed invention may be considered a patentable invention even if the constituent parts of the claimed invention are found in the applied references.

Specifically, *In re Peehs* held, in part

“[a] patentable invention may lie in the discovery of the source of a problem even though the remedy may be obvious once the source of the problem is identified. This is part of the ‘subject matter as a whole’ [test] which should always be considered in determining the obviousness of an invention under 35 U.S.C. §103.”

*In re Peehs*, 612 F.2d 1287, 204 USPQ 835 (CCPA 1980)

In view of the above holding, Applicants submit that one of ordinary skill in the art did not even recognize the problem which is solved by the present invention. This problem is not even recognized in any of the references and, as such, the benefits of the present invention would not have even been known prior to the present invention. Accordingly, even if a combination of references teaches the constituent parts, it certainly is not obvious to combine such references. Thus, the solution would then not be obvious. This would simply be using impermissible hindsight reasoning based on Applicants’ disclosure in order to achieve the claimed invention based on the combined references. In particular, none of the references teach preapplying glue in order to avoid welling of the glue and other problems solved by the present invention.

It is further submitted that the references do not even teach all of the features of the claimed invention. Namely, the references do not teach the use an adhesive layer, or a substance which activates an adhesive, applied to the groove at least in the area of its divergent sides or to the tongue at least in the area of its divergent wedge-shaped area, or to both areas. It is also submitted that the gluing system of some of these prior art systems would not result in the advantages of the present invention, as stated above. For example, by using the glued systems of the prior art, the two surfaces that come into contact must be pressed together with a considerable degree of pressure, as specifically shown in Scarlett, making it impossible to

additionally adjust the glued joint in the longitudinal direction for the purpose of closing a transverse joint.

As to the rejection of claims 1-31, the Examiner is of the opinion that the Roesch reference shows the use of a two part adhesive, and that this reference can be used to show the features of the claims relating to the adhesive features, itself. However, Applicants again respectfully disagree with the Examiner.

First, Roesch teaches the use of a two part adhesive for pipes. This system is not a flooring panel system, nor even remotely related to a flooring panel system. Accordingly, one of ordinary skill in the art would not have been motivated or known to combine the Austrian reference 405,560 or any of the other references related to structural beams with that of Roesch. The combination of such non-analogous references would simply be improper.

Also, in these claims, the use of strands, micro-encapsulated adhesives, the placement and configuration of such adhesives and the like are recited in specificity. However, Roesch does not teach, explicitly or implicitly, the features and advantages of these claims. By way of some examples and as previously discussed, Roesch, alone or in combination with the applied references, does not show:

1. A filling comprising the adhesive or glue that is stabilized by removal of a solvent or a dispersion agent but that can be reactivated upon contact with the solvent, and a film or covering that is applied or sprayed on before the panels are joined together and that at least moistens the tongues, or with a surface impregnation comprising the solvent or dispersing agent which serves as an activator for the adhesive or glue. (claim 4)
2. A filling comprising a dispersion glue that is stabilized by the removal of water, but that can be reactivated upon contact with a solvent and comprising a fast-binding and mounting glue on a polyvinyl acetate base. (claim 5)

3. A two-component polymerization glue, in a form of a hardener varnish, the hardener varnish has an organic peroxide as its base and the first component is a resin component which has a methyl acrylate base. Alternatively, the hardener varnish has an aliphatic or cycloaliphatic polyamine as its base and the resin component is based on at least one of an epoxide and bisphenol A and bisphenol F resin. (claims 6, 7 and 8)
4. Lastingly sticky and permanently active adhesive glue exhibiting viscosity values between 15,000 and 1500 centi-poise at temperatures between 140 and 170 C and applied at temperatures in the indicated range. (claim 16)
5. A flexible polymer material that is adhesive relative to the material of the panel, at least upon application of the integral adhesive strand, and that will set rapidly, and with butyl rubber or with a two-component or moisture-linking polyurethane rubber mass. (claim 18)
6. An integral adhesive strand that exhibits a cross-section with the shape of a flattened dome. (claim 19)
7. A coating exhibits a basically uniform layer thickness in the range from 0.1 to 0.4 with thickness tolerances in the range of 0.05 mm. (claim 20)

Roesch, on the other hand, shows a microencapsulatable solvent adhesive composition for coupling plastic conduits, such as pipes, connectors and related fittings comprising a water-insoluble polymer and a mixture of volatile organic solvents for the polymer. This solvent adhesive composition is suitable for microencapsulation by aqueous-based microencapsulation processes. A plurality of microcapsules encapsulating the solvent adhesive composition are bound to a polymeric surface of a conduit, such as a pipe connector or fitting, by a binder

composition, to form a surface coated with a layer of rupturable microcapsules. When the microcapsules are ruptured upon joining of the coated conduit to a second conduit, the volume of the released solvent adhesive composition is sufficient to cement the surfaces together.

Also, Roesch does not use its two part components with a flooring panel system. Nowhere is there any suggestion in this reference for using this two component mix in a floor panel, much less one that is disclosed and claimed in the invention. The Roesch reference is used for pipes which is such a divergent art from the Austrian reference 405,560 and remaining references that one of ordinary skill in the art would not have been provided any motivation to combine such references in order to achieve the claimed invention.

Accordingly, Applicants respectfully request that the rejections over claims 1-31 be withdrawn.

### CONCLUSION

In view of the foregoing amendments and remarks, Applicants submit that all of the claims are patentably distinct from the prior art of record and are in condition for allowance. The Examiner is respectfully requested to pass the above application to issue. The Examiner is invited to contact the undersigned at the telephone number listed below, if needed. Applicant hereby makes a written conditional petition for extension of time, if required. Charge any deficiencies in fees and credit any overpayment of fees to Deposit Account No. 23-1951.

Respectfully submitted,



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